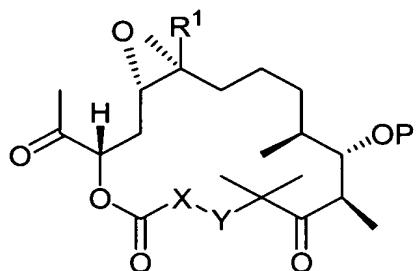


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently Amended) A compound of the formula:



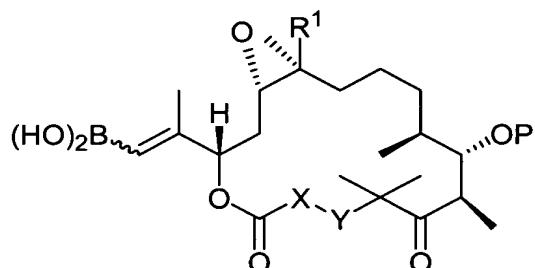
wherein

R¹ is a H atom or a C₁- to C₈-alkyl group,

X-Y is a group of the formula -CH₂CH-OP-CH₂CH(OP)- or -CH=CH-, and

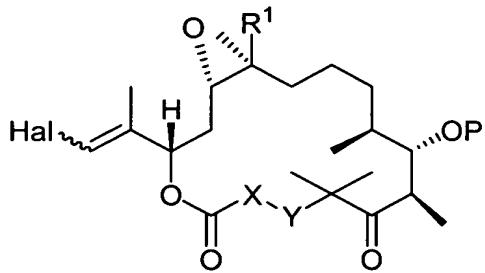
P is a protecting group.

2. (Previously Presented) A compound of the formula:



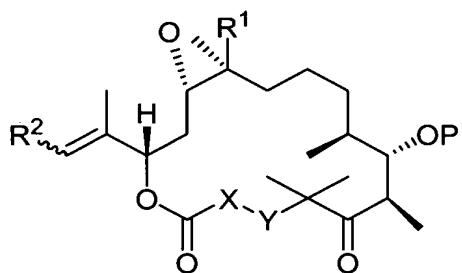
wherein the radicals are as defined in claim 1.

3. (Previously Presented) A compound of formula:



wherein the residues R¹, X-Y and P are defined as in claim 1, and Hal is a halogen.

4. (Currently Amended) A compound of the formula:

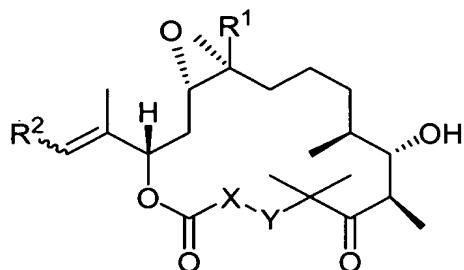


wherein the residue R¹ is a hydrogen atom or a C₁₋₈-alkyl group, and P is a protective group and X-Y is a group of formula -CH₂CH-OP-CH₂CH(OP)- or CH=CH, and R² is a monocyclic aromatic which can be substituted by a halogen atoms and/or OR⁴- and/or NR⁵R⁶- and/or alkyl, alkenyl and/or alkynyl groups in ortho- and/or meta- and/or para-position, or a monocyclic 5- or 6-membered hetero aromatic, which can be provided with optionally substituted with one or several O- and/or N- and/or S-atoms in the ring and/or which can be provided with optionally substituted with OR⁴- and/or NR⁵R⁶- and/or alkyl, alkenyl and/or alkynyl groups as substituents, wherein the residues R⁴, R⁵ and R⁶ independently are defined as R¹ in claim 1, but are independent of R¹ are each independently a hydrogen atom or a C₁₋₈-alkyl group, wherein

(i) XY is excluded as group of formula -CH=CH- if R¹ is a hydrogen atom or a C₁₋₄-alkyl group and R² is a monocyclic hetero aromatic having a N atom or a N and a S atom in its ring and a C₁-alkyl substituent and

(ii) XY is excluded as group of formula -CH₂CH-OP -CH₂CH(OP)- if R¹ is a hydrogen atom or a C₁₋₄-alkyl group and R² is a monocyclic hetero aromatic having a N atom or a N and a S atom in its ring and a C₁-alkyl substituent.

5. (Currently Amended) A compound of the formula:



wherein the residues are as defined in claim 4 and, if X-Y means a group of formula -CH₂-CH-OP, the protective group P has been removed , wherein

(i) XY is excluded as group of formula -CH=CH- if R¹ is a hydrogen atom or a C₁₋₄-alkyl group and R² is a monocyclic hetero aromatic having a N atom and a S atom in its ring and a C₁-alkyl substituent and

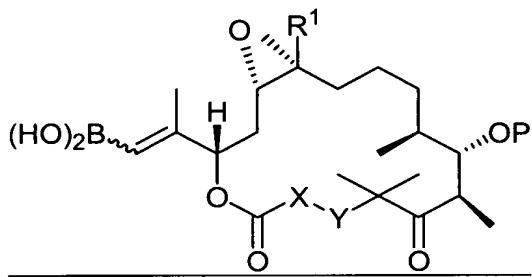
(ii) XY is excluded as group of formula -CH₂CH-OP -CH₂CH(OP)- if R¹ is a hydrogen atom or a C₁₋₄-alkyl group and R² is a monocyclic hetero aromatic having a N atom or a N atom and a S atom or a N atom and a O atom in its ring and a C₁-alkyl substituent.

6. (Currently Amended) A compound Epothilone derivative as in claims 1, 2, 3, 4, 5 or 22 wherein R¹, R⁴, R⁵ and R⁶ are a hydrogen atom or a C₁₋₆-alkyl group.

7. (Currently Amended) A compound as in claims 4, 5, 6 or 22 wherein the substituents of the monocyclic aromatic and/or hetero aromatic are C₁₋₆-alkyl, C₂₋₆-alkenyl, and C₂₋₆-alkynyl, groups respectively, and fluoro, chloro, bromo or iodo atoms fluorine, chlorine, bromine or iodine.

8. (Currently Amended) A compound as in claims 4, 5, 6, 7 or 22 wherein the monocyclic aromatic and and/or monocyclic hetero aromatic, respectively, is provided with optionally substituted with 1, 2 or 3 substituents and the hetero aromatic is provided with optionally substituted with 1, 2 or more hetero atoms in the ring.

9. (Currently Amended) Process for the production preparation of a compound of claim 2, characterised in that a compound of claim 1 is reacted with a compound of the formula $\text{HC}[\text{B}(\text{OR})_2]_3$, the radicals being as defined in one of the preceding claims and R being as defined for R^+ but being independent of R^+ the formula:



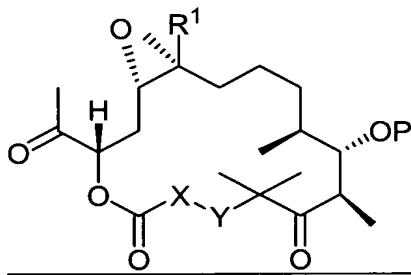
wherein

R^1 is a H atom or a C₁- to C₈-alkyl group,

X-Y is a group of the formula -CH₂CH(OP)- or -CH=CH-, and

P is a protecting group,

comprising reacting a compound of the formula:



wherein

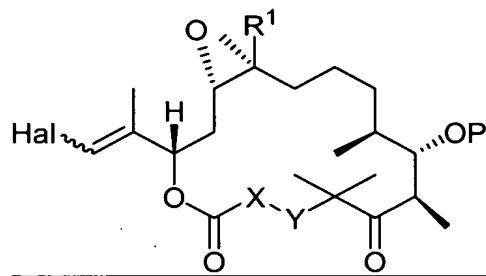
R^1 is a H atom or a C₁- to C₈-alkyl group,

X-Y is a group of the formula -CH₂CH(OP)- or -CH=CH-, and

P is a protecting group,

with a compound of the formula $\text{HC}[\text{B}(\text{OR})_2]_3$, wherein R is a H atom or a C₁- to C₈-alkyl group.

10. (Currently Amended) Process for the production preparation of a compound of claim 3, characterised in that a compound of claim 2 is reacted with N-iodo or N-bromo-succinimide and the radicals are as defined in one of the preceding claims the formula:



wherein

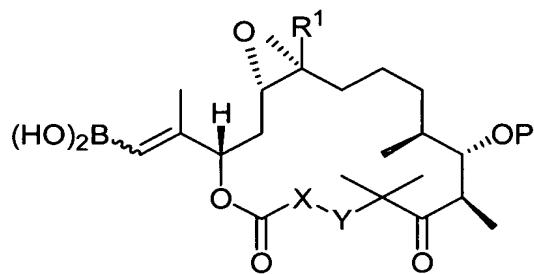
R¹ is a H atom or a C₁- to C₈-alkyl group,

X-Y is a group of the formula -CH₂CH(OP)- or -CH=CH-,

P is a protecting group,

and Hal is a halogen,

comprising reacting a compound of the formula:



wherein

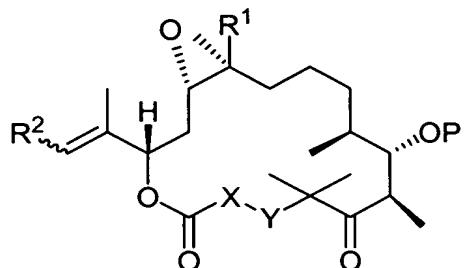
R¹ is a H atom or a C₁- to C₈-alkyl group,

X-Y is a group of the formula -CH₂CH(OP)- or -CH=CH-, and

P is a protecting group,

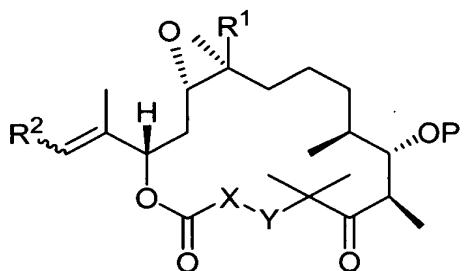
with N-iodo or N-bromo-succinimide.

11. (Currently Amended) Process for the preparation of a compound of formula:



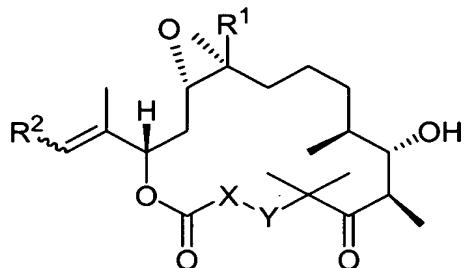
wherein a compound according to claim 2 is reacted by a Suzuki coupling with a compound of formula R²-Z, wherein R² is a monocyclic aromatic which can be substituted by halogen atoms and/or OR⁴- and/or NR⁵R⁶- and/or alkyl, alkenyl and/or alkynyl groups in ortho and/or meta- and/or para-position, or a monocyclic 5- or 6-membered hetero aromatic, which can be provided with optionally substituted with one or several O- and/or N- and/or S-atoms in the ring and/or which can be provided with optionally substituted with OR⁴- and/or NR⁵R⁶- and/or alkyl, alkenyl and/or alkynyl groups as substituents and Z can be a halogen atom or a group of formula -OSO₂CF₃, -CH=CHI, -CH=CHOSO₂CF₃.

12. (Currently Amended) Process for the preparation of a compound of formula:



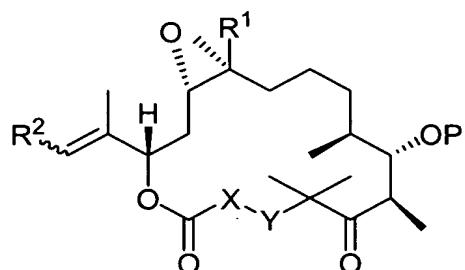
wherein a compound according to claim 3 is reacted by a silent coupling (stille Kupplung) with R₂-SNR³₃, wherein R² is a monocyclic aromatic which can be substituted by halogen atoms and/or OR⁴- and/or NR⁵R⁶- and/or alkyl, alkenyl and/or alkynyl groups in ortho- and/or meta- and/or para-position, or a monocyclic 5- or 6-membered hetero aromatic, which can be provided with optionally substituted with one or several O- and/or N- and/or S-atoms in the ring and/or which can be provided with optionally substituted with OR⁴- and/or NR⁵R⁶- and/or alkyl, alkenyl and/or alkynyl groups as substituents and R³ is a C₁₋₆-alkyl group.

13. (Previously Presented) Process for the preparation of a compound of formula:



wherein the protective group is removed from a compound according to claim 4.

14. (Previously Presented) Process for the preparation of a compound of formula:



wherein it comprises the process steps as disclosed in claims 9, 10, 11, 12 or 13.

15-17. (Canceled)

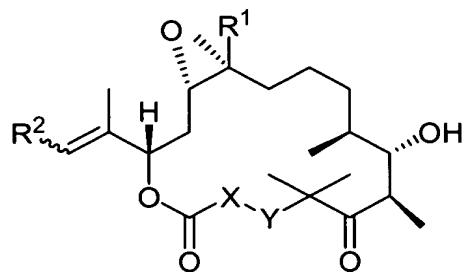
18. (Original) A pharmaceutical composition comprising at least one of the compounds described in claims 1, 2, 3, 4, 5, 6, 7, 8 or 22 and optionally carriers, diluents and/or auxiliary agents.

19. (Original) The pharmaceutical composition according to claim 18, wherein said compound is cytostaticum.

20. (Original) A method of protecting plants in agriculture and/or forest culture and/or horticulture, comprising administering a therapeutically effective amount of at least one compound described in claim 1 and optionally carriers, diluents and/or auxiliary agents.

21. (Canceled)

22. (Currently Amended) A compound of formula:



wherein the residues are defined as in claim 4 and, if $\text{X}-\text{Y}$ means a group of formula —
 ~~$\text{CH}_2\text{CH-OP-CH}_2\text{CH(OP)-}$~~ , the protective group P has been removed, wherein

- (i) XY is excluded as group of formula $-\text{CH}=\text{CH-}$ if R^1 is a hydrogen atom or a C_{1-4} -alkyl group and R^2 is a monocyclic hetero aromatic having a N atom and/or a S atom in its ring and a C_1 -alkyl substituent and
- (ii) XY is excluded as group of formula $-\text{CH}_2\text{CH-OP-CH}_2\text{CH(OP)-}$ if R^1 is a hydrogen atom or a C_{1-4} -alkyl group and R^2 is a monocyclic hetero aromatic having a N atom or a N atom and a S atom or a N atom and an O atom in its ring and a C_1 - alkyl substituent.

23. (Previously Presented) A compound according to claim 22, wherein the substituents of the monocyclic aromatic and/or hetero aromatic are a C_{1-6} -alkyl, C_{2-6} -alkenyl or C_{2-6} -alkynyl group or a halogen atom.

24. (Currently Amended) A compound according to claim 22, wherein the monocyclic aromatic ~~and~~ and/or monocyclic hetero aromatic, respectively, is ~~provided with~~ optionally

substituted with 1, 2 or 3 substituents and the hetero aromatic is ~~provided with~~ optionally substituted with 1, 2 or more hetero atoms in the ring.

25. (Currently Amended) A compound according to claim 23, wherein the substituents of the monocyclic aromatic and/or hetero aromatic are C₁₋₄-alkyl, C₂₋₄-alkenyl ~~and~~ or C₂₋₄-alkynyl groups.